

Appl. No. 09/691,308
Amdt. dated July 1, 2003
Reply to Office action f April 1, 2003

REMARKS

This is in response to the Office Action mailed April 1, 2003. In the Office Action, Applicants' Claims 1, 6-8, 10-11, 13, 16-20 and 22-30 were rejected as obvious in view of the combination of U.S. Pat. No. 5,864,632 ("Ogawa") and U.S. Pat. No. 6,405,132 ("Breed"). Applicants' Claims 2-4 were rejected as obvious in view of the combination of Ogawa and Breed and in further view of "GDF, A Proposed Standard for Digital Road Maps" ("Heres"). Applicants' Claim 5 was rejected as obvious in view of the combination of Ogawa and Breed and in further view of U.S. Pat. No. 6,317,081 ("Stilp"). Applicants' Claim 9 was rejected as obvious in view of the combination of Ogawa and Breed and in further view of "Sources of Satellite Imagery" ("Fowler"). Applicants' Claim 12 was rejected as obvious in view of the combination of Ogawa and Breed and in further view of U.S. Pat. No. 6,138,072 ("Nagai"). Applicants' Claim 14-15 was rejected as obvious in view of the combination of Ogawa and Breed and in further view of U.S. Pat. No. 5,099,331 ("Truong"). Applicants' Claim 21 was rejected as obvious in view of the combination of Ogawa and Breed and in further view of U.S. Pat. No. 6,397,143 ("Peschke").

With this response, Applicants have amended Claims 1, 6 and 30 and added new Claim 31. These amendments are intended to clarify the non-obvious subject matter recited in these claims. Support for these amendments can be found in the specification of the present application. No new matter has been added. Applicants respectfully request reconsideration of the present application. Applicants submit that Claims 1-31 are not obvious over the cited references. Each of these claims is addressed below.

Applicants' independent Claim 1

Applicants' independent Claim 1 relates to a method of updating a geographic database. According to Claim 1, "a report about errors in data that represent geographic features" is obtained. The method identifies "a location of at least one of said errors" and obtains "a satellite image containing said location of said error." The method further determines from the satellite image appropriate changes to make to the master copy of the geographic database to correct the error. The recited method of Claim 1 provides an efficient

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way to correct the error by obtaining and analyzing a satellite image containing the location of the error.

Applicants' independent Claim 1 was rejected as obvious over the combination of Ogawa and Breed. Applicants submit that Claim 1 is not obvious over this combination of references because this combination of references does not disclose all the elements of this claim. Although, Ogawa discloses editing a digital map by periodically obtaining satellite images and Breed discloses probe vehicles report errors, the combination does not disclose identifying a location of at least one error and obtaining satellite image containing the identified location of the error.

Ogawa relates to a map editing device for updating a three-dimensional digital map. In the updating processing, Ogawa periodically obtains satellite images corresponding to areas covered with the digital map. (See, Ogawa: column 6, lines 15-24). Using the satellite images, Ogawa identifies changes in the areas. (See, Ogawa: column 2, lines 1-3). However, Ogawa does not disclose identifying a location of an error and obtaining a satellite image containing the location of the error. In fact, Ogawa has no disclosure relating to obtaining a satellite image based on reports about errors (See, Office Action, page 3). Because Ogawa does not disclose identifying a location of the error and obtaining the satellite image containing the location of the error, Ogawa does not focus its analysis and editing on the image containing the location of the error. Rather, Ogawa inefficiently analyzes every image for any changes regardless of whether the error is located on only one of those images.

Breed discloses an apparatus for preventing vehicle accidents. Additionally, Breed indicates that cars with GPS positioning systems may be used as probe vehicles to check the validity of the maps and report any errors. (See, Breed: column 55, lines 12-15). However, Breed does not disclose obtaining a satellite image containing the location of the error. In fact, Breed has no disclosure relating to satellite images.

Because Ogawa and Breed fail to disclose all of the limitations of Applicants' Claim 1, this claim is not obvious over this combination of references. Applicants respectfully request that the rejection of Claim 1 be withdrawn.

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Applicants' independent Claim 6

Applicants' independent Claim 6 relates to a method of updating a master copy of a geographic database. According to Claim 6, "a report relating to at least one geographic feature" is obtained. The method identifies "a location corresponding to said report" and obtains "a satellite image of the location corresponding to said report." The method further analyzes the satellite image to determine how to update the master copy. The recited method of Claim 6 provides an efficient way to update the database by obtaining and analyzing a satellite image containing the location corresponding to the report.

Applicants' independent Claim 6 was rejected as obvious over the combination of Ogawa and Breed. Applicants submit that Claim 6 is not obvious over this combination of references because this combination of references does not disclose all the elements of this claim. Specifically, the combination does not disclose identifying a location corresponding to the report and obtaining a satellite image of the location corresponding to the report.

Ogawa relates to a map editing device for updating a three-dimensional digital map. In the updating processing, Ogawa periodically obtains satellite images corresponding to areas covered with the digital map. (See, Ogawa: column 6, lines 15-24). Using the satellite images, Ogawa identifies changes in the areas. (See, Ogawa: column 2, lines 1-3). However, Ogawa does not disclose identifying a location corresponding to the report and obtaining satellite image containing that location. In fact, Ogawa has no disclosure relating to obtaining a satellite image based on reports (See, Office Action, page 3). Because Ogawa does not disclose identifying a location corresponding to the report and obtaining the satellite image containing the location corresponding to the report, Ogawa does not focus its analysis and editing on the image containing the location corresponding to the report. Rather, Ogawa inefficiently analyzes every image for any changes regardless of whether the feature of the report is located on only one of those images.

Breed discloses an apparatus for preventing vehicle accidents. Additionally, Breed indicates that cars with GPS positioning systems may be used as probe vehicles to check the validity of the maps and report any errors. (See, Breed: column 55, lines 12-15). However, Breed does not disclose obtaining a satellite image containing the location corresponding to the report. In fact, Breed has no disclosure relating to satellite images.

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Because Ogawa and Breed fail to disclose all of the limitations of Applicants' Claim 6, this claim is not obvious over this combination of references. Applicants respectfully request that the rejection of Claim 6 be withdrawn.

Applicants' independent Claim 30

Applicants' independent Claim 30 relates to a method of updating a geographic database. According to Claim 30, a "report indicating a location of an error" is obtained. The method determines "whether the report relates to a type of error that is suitable for confirmation by satellite imagery." If so, a satellite image of the location is obtained and is analyzed to determine a correction. The geographic database is updated with the correction.

Applicants' Claim 30 addresses updating the geographic database. Certain types of errors are suitable for confirmation by satellite imagery, such as road geometry, placement of roadway dividers, the number of roadways lanes, and so on. Other types of errors are not suitable for confirmation by satellite imagery, such as addresses, street names, business names or sign text. These errors unsuitable for confirmation by satellite imagery may require field inspection or other review. According to Claim 30, the method determinates whether the report relates to a type of error that is suitable for confirmation by satellite imagery. If so, a satellite image of the location is obtained and analyzed to update the geographic database with the correction.

Applicants' independent Claim 30 was rejected as obvious over the combination of Ogawa and Breed. Applicants submit that Claim 30 is not obvious over this combination of references because this combination of references does not disclose all the elements of this claim. Specifically, the combination does not disclose determining whether the report relates to a type of error that is suitable for confirmation by satellite imagery. In fact, Ogawa and Breed fail to make any distinction between errors that are suitable or unsuitable for confirmation by satellite imagery. Ogawa merely periodically retrieves satellite images to edit a three-dimensional digital map (*See*, Ogawa: column 6, lines 20-24) but fails to disclose obtaining images based upon reports about errors that are suitable for confirmation by satellite imagery. Breed merely indicates that cars can be used as probe vehicles to check the validity of the maps and report any errors. (*See*, Breed: column 55, lines 12-15). Breed fails to

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disclose the determination of whether the report of errors is suitable for confirmation by satellite imagery.

Because Ogawa and Breed fail to disclose all of the limitations of Applicants' Claim 30, this claim is not obvious over this combination of references. Applicants respectfully request that the rejection of Claim 30 be withdrawn.

Applicants' dependent Claims 2-5, 7-29 and 31

Applicants' Claims 2-5, 7-29 and 31 are dependent claims that distinguish the cited references at least for the same reasons explained above in connection with their independent base Claims 1, 6 and 30. In addition, these claims recite further features and limitations that are neither disclosed nor suggested by these references.

Conclusion

All the issues in the Office Action, dated April 1, 2003 have been addressed. Favorable consideration of the present application is requested. If any issues remain, the Examiner is invited to call the undersigned.

Respectfully submitted,



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